

Ⅲ. 八 丈 島 産 盲 蛛 類

八丈島のザトウムシは鈴木正將氏の同定を煩わしたところヒトヘリザトウムシ *Gagrella japonica* Roewer であることがわかった。本種の既知分布地は本州・四國・九州で、海岸地帯に極めて普通な種であるという。北海道には亜種を産する。

IV. 瀧 氏 採 集 八 丈 島 産 蜘蛛 類

東海區水産研究所の瀧庸博士が1950年5月下旬八丈島に赴き動物採集をなされた。その時クモも若干お採りになり調査を私に託されたので拜見した結果を併せ記す。5月24日同島硫黄山でのクモは標本が大變いたんでいて種名確定出来たのはハラクロコモリグモとミスジハエトリの2種で、他にハエトリグモ1種、コシロガネグモかと思われるもの、破損の爲全然不明のもの等があつた。又23日同島に於ける採集品はカニグモ1種 *Xysticus* sp. であつた。之等は何れも前記目録中に含まれた種類である。

NOTES ON THE SCORPION OF HAINAN ISLAND

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Hainan Island, the largest island of China, locates at the extreme southern coast of China. The area of the island is about 12,000 square miles, being somewhat larger than Formosa. The 20th parallel passes through its northern extremity. Its vertebrate fauna has been well studied. Of the several Japanese zoologists who studied vertebrates of the island mention should be made of Dr. Kuroda and Dr. R. Tanaka who worked on mammals, Dr.

Hachisuka who studied birds, Dr. Harada who reported on fresh water fishes. Zoogeographically the island belongs to the Indo-China subregion of the Oriental region and its fauna resembles that of Formosa. The presence here of the black gibbon, *Hylobates concolor* among Mammalia, the red jungle fowl, *Gallus gallus gallus* among Aves, the Indian python, *Python molurus*, the big-headed tortoise, *Platysternum megacephalum* among Reptilia, etc shows rather an abundance of species and the element of the Oriental region is more richly represented. In invertebrates, however, there are many groups still lacking in any complete knowledge.

With the occupation of the island by Japanese Naval units in an early part of 1939 at the time of Japano-Chinese incident many Japanese found opportunities of going there. Scientific expeditions, medical corps, etc. were also dispatched there so that through the hands of these people the specimens of scorpions were brought back to Japan.

It was through the kind generousities of Masao Watanabe, Isao Taki, Hajime Uchida, Michio Chujo, Sataro Kataoka, Hisashige Hatakeyama, Chujiro Tsuji, the late Hironobu Doi, Isokichi Harada and others that the writer had the opportunity of examining 53 specimens of adults and juveniles of Hainan scorpions, all belonging to two different species only.

When the species heretofore been known through the works of other zoologists are added to these, the scorpions of Hainan Island may be counted as four species of four genera as shown below :

- 1 *Lychas mucronatus* (Fabricius, 1798) [Buthidae]
- 2 *Isometrus europaeus* (Linné, 1758) [Buthidae]
- 3 *Heterometrus longimanus petersii* (Thorell, 1876) [Scorpionidae]
- 3' *H. longimanus longimanus* (Herbst, 1800)
- 4 *Liocheles australasiae* (Fabricius, 1775) [Scorpionidae]

The fauna of Loochoo includes 2 species mentioned under 2 and 4. The Formosan fauna is just the same. In southern China all of the 4 species listed

1-4 in addition to the one listed as 3' are seen. According to Fage (1933) and others French Indo-China produces 11 species belonging to 8 genera. Although the author have examined only 2 species from Thai, Thai fauna of scorpions may include 6 species of 4 genera if all of possible ones are counted. The scorpions of Hainan Island will probably be confined to these 4 species. 3', namely *H. longimanus longimanus* may in all possibility be collected again in future. All of these 4 species have a wide distributional area in southern Asia and consequently will add no characteristics to the zoogeographical position of Hainan Island. *Lychas* extends from the southern Asia to Australia and Africa. Of these *Lychas mucronatus* has a wide distribution in the southern Asia but it could not be found in India and New Guinea. *Isometrus* will in all probability be found in the southern Asia and Australia, and *I. europaeus* which originated in Oriental Region has now a cosmopolitan distribution over the tropical as well as subtropical regions. *Heterometrus* is also widely distributed all over the southern Asia with the exception of New Guinea and its neighbouring islands, while *petersii* and *longimanus*, too, are thought to have a parallel distribution as a whole, but the subspecies *petersii* seems to have no record from both Philippine and Malaya islands. Some treat *longimanus* and *petersii* as two independent species, but the writer thinks the difference between the two are but subspecific at the best. The specimens of *petersii* the author has seen are 3 specimens consisting of those from Thai and Burma, but if he should be blessed with the opportunity of examining many more of specimens corresponding to *petersii*, he hopes he will be able to make the difference between the two species clearer. *Liocheles* extends in its distribution to the countries of the southern Asia and Australia to as far east as New Caledonia, Fiji Islands, Samoa Islands and Tahiti Island, while *L. australasiae* inhabits not only Yaeyama Islands* but also all the regions above mentioned. The venom of these 4 species including large *H. l. petersii* is of rather slight nature, the

cases in which it becomes fatal being almost rare. Some Japanese soldiers of those war days were of course stung by scorpions.

I append this short report by adding the key and synonymy of Hainan scorpions.

- 1 Total length 10 cm; black; pectinal teeth 14~17 (usually 15)
H. l. petersii
- 2 Total length below 10 cm; without black lustre
 - 1a Without tibial spurs on 3rd and 4th legs
 - 2a Pectinal teeth 17~19 (usually 18).....L. europaeus
 - 2b Pectinal teeth 4~8 (usually 6).....Lio. australasiae
 - 1b Tibial spurs present on 3rd and 4th legs; pectinal teeth 17~22.....
I.y. mucronatus

Gen. *Lychas* C. L. Koch (1845)

1 *L. mucronatus* (Fabricius, 1798)

Scorpio mucronatus Fabricius, Ent. Syst., suppl., p. 294 (1798)

Isometrus mucronatus, Thorell, Ann. Mus. Genova, xxvii, p. 566 (1889)

Isometrus (*Archisometrus*) *mucronatus*, Pocock, Webers Reise Niederl. O.-Ind., iii, p. 85 (1893)

Archisometrus mucronatus, Kraepelin, Scorp. u. Pedip., Das Tierreich Lief. 8, p. 46 (1899); Wu, Sinensia, vii, no. 2, p. 117 (1936)

Lychas mucronatus, Pocock, Fauna Brit. Ind. Arachnida, p. 36 (1900); Meise, Mitt. Zool. Mus. Berlin, xviii, Ht. 3, p. 264 (1932); Werner, Bronns Klass. Ord. Tierreichs, v, Abt. 4, Buch 8, Lief. 2, p. 271 (1934); Takashima, Biogeographica, iii, no. 3, p. 282 (1941)

Lychas chinensis, Kishida, Rep. 1st Sci. Exped. Manchoukuo, Sec. V, Div. 1, Part IV, Art. 10, p. 44 (1939)

Gen. *Isometrus* Hemprich et Ehrenberg (1828)

2 *I. europaeus* (Linné, 1758)

*The Japanese name to this species is "Yaeyama-sasori" which means the scorpion found in Yaeyama Is., Riu Kiu Group.

Scorpio europaeus Linné, Syst. Nat. ed. 10, p. 625 (1758)

Scorpio maculatus de Geer, Mém. Hist. Ins., vol. vii, p. 346 (1778)

Isometrus europaeus, Lönnberg, Ann. Nat. Hist., ser. 7, vol. i, p. 86 (1897);

Takashima, Acta Arachnol., xi, nos. 1/2, p. 34 (1949)

Isometrus maculatus, Kraepelin, S. P., Tierr. Lief. 8, p. 66 (1899)

Gen. *Heterometrus* Hemprich et Ehrenberg (1828)

3 *H. longimanus petersii* (Thorell, 1876)

Heterometrus megacephalus, Simon, Rev. Mag. Zool., ser. 2, xxiii, p. 9 (1872)

Palamnaeus Petersii Thorell, Ann. Mag. Nat. Hist., ser. 4, xvii, no. 97, p. 13 (1876)

Palamnaeus silenus Simon, Ann. Mus. Genova, xx, p. 361 (1884)

Scorpio longimanus silenus, Kraepelin, Mitt. Mus. Hamburg, xi, p. 41 (1894)

Heterometrus longimanus silenus, Kraepelin, S. P., Tierr. Lief. 8, p. 111 (1899)

Heterometrus longimanus petersi, Giltay, Mém. Mus. Hist. nat. Belg., Hors Série, iii, fasc. 7, p. 4 (1931)

Heterometrus silenus, Kishida, Rep. 1st Sci. Exped. Manchoukuo, Sec. V, Div. 1, Part IV, Art. 10, p. 45 (1939) ["Hainantō"]

Heterometrus longimanus petersii, Takashima, Acta Arachnol. vii, nos. 3/4, p. 126 (1942)

I have not examined this species from Hainan yet myself.

Gen. *Liocheles* Sundevall (1833)

4 *L. australasiae* (Fabricius, 1775)

Scorpio australasiae Fabricius, Syst. Ent., p. 399 (1775)

Liocheles australasiae, Simon, Journ. Asia. Soc. Bengal, lvi, p. 113 (1887);

Takashima, Acta Arachnol., xi, nos. 1/2, p. 39 (1949)

Hormurus australasiae, Pocock, Webers Reise Niederl. O.-Ind., iii, p. 96 (1893);

Wu, Sinensia, vii, no. 2, p. 121 (1936) ["Hwang Chu and Sha-Mü-Chüh, Hainan"]

I have not examined this species from Hainan yet myself.